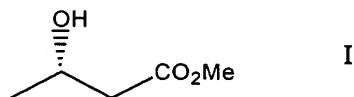


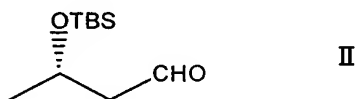
CLAIMS

1. A method for synthesizing macrospinelides, characterised by:

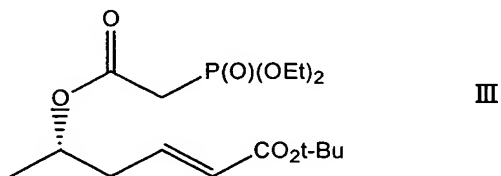
preparing methyl 3-hydroxybutyrate, expressed by formula I, as a starting material,



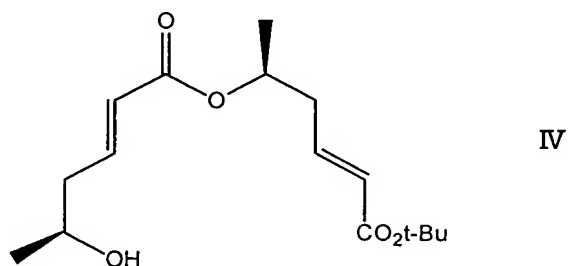
forming 3-(tert-butyldimethylsilyloxy) butylaldehyde, as expressed by formula II, by protecting hydroxyl group of the methyl 3-hydroxybutyrate, then performing reduction to alcohol, and then oxidizing the alcohol,



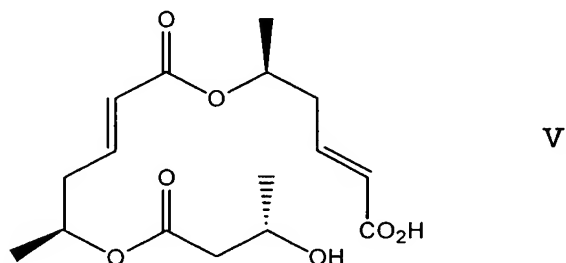
forming tert-butyl 5-[2-(diethylphosphonoyl) acetoxy] hex-2-enoate, as expressed by formula III, by reacting the aldehyde with tert-butyl diethylphosphonoacetate to give an olefin, then performing deprotection, and then dehydrating and condensing with diethylphosphonoacetic acid,



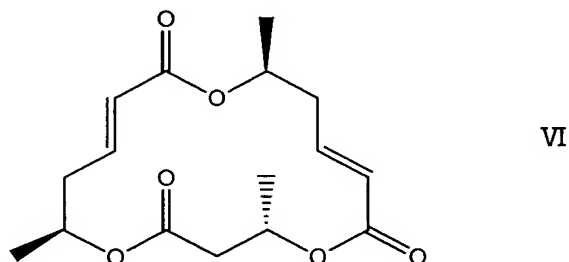
forming an alcohol, as expressed by formula IV, by reacting the compound with the aldehyde expressed by formula II to form a diester, and then performing deprotection,



forming hydroxycarboxylic acid, as expressed by formula V, by dehydrating and condensing the alcohol with 3-(tert-butyldimethylsilyloxy) butyric acid to give a triester, and then performing deprotection,



- 5 obtaining a macrosphelide core, as expressed by formula VI, by macrolactonization of the hydroxycarboxylic acid,



2. A method for synthesizing enantiomer of macrosphelides, characterised by:
- 10 in the synthesis method according to claim 1, using a desired enantiomer for the methyl 3-hydroxybutyrate that is the starting material.
3. A method for synthesizing allylic position oxidants of macrosphelides, characterised by:
- 15 oxidizing the allylic position of the macrosphelides obtained in accordance with the synthesis method according to claim 1.